

Date: Tuesday, 16/09/2008 2:38:42 PM
 User: Linda Lacelle

Process Sheet

SPLIT-2

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 42033 -2
 Estimate Number : 13228
 P.O. Number :
 This Issue : 16/09/2008 S.O. No. :
 Prsht Rev. : NC
 First Issue : 16/09/2008 Type : PURCHASED PARTS
 Previous Run : 42032
 Written By :
 Checked & Approved By :
 Comment : Est Rev:A 08-09-16 New Issue LL

Drawing Name : 212 DETAIL PARTS
 Part Number : D2127251937
 Drawing Number : D212-725-1 REV E
 Project Number : N/A
 Drawing Revision :
 Material : N/A
 Due Date : 23/09/2008 Qty: 4 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING



Comment: PURCHASING

Issue P/O: 71167 to Cimtube ltee
 Make per drwg D212-725-1 Rev. E

ship to supplier:

1 x AN818-10J nut B m105206
 1 x MS20819-10J sleeve B m105206

C208/09/114

⑤

2.0 AN81810J nut



Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)
 nut m105206 C208/09/115 ⑤

3.0 MS2081910J sleeve



Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)
 sleeve m105206 C208/09/115 ⑤

4.0 D2127251937 tube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)
 tube

5.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

RECEIVE AND INSPECT FOR

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212 DETAIL PARTS

Job Number: 42033

Part Number: D2127251937

Job Number:



Seq. #:

Machine Or Operation:

Description :

TRANSIT DAMAGE
ENSURE C OF C ATTACHED

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT LEVEL 5

5/11/17 (4)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Identify with P/N and B/N using a fine point marker

Location: _____

08.11.14 (4) *KEPT IN CALGARY*

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

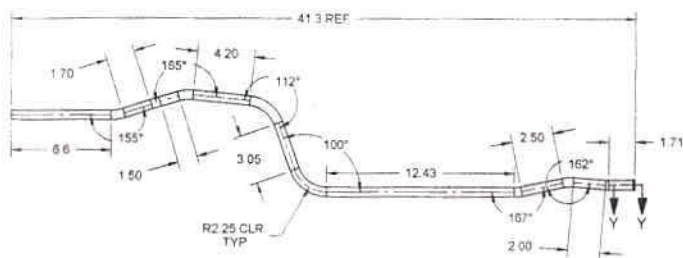
08/11/17

Job Completion

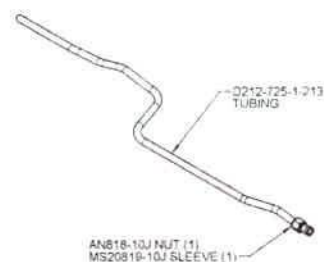
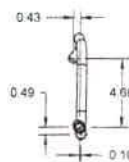


u 08.11.17

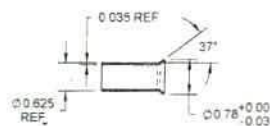
S 73



D212-725-1-213 TUBING
(MANUFACTURE PER TEMPLATE DT8917)



D212-725-1-937 TUBE ASSEMBLY



SECTION Y-Y
(FINISH FLARE THIS
END AFTER ASSEMBLY)
SCALE 3X

- NOTES
- 1) MATERIAL: AISI 304/316 SS $\phi 0.625 \times 0.035$ WALL SEAMLESS ROUND TUBING (REF: DART SPEC: M304TR0 625W 035)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART 0.61 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK: SHARP EDGES: 0.006 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY BN & PN D212-725-1-937 USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.56 lbs

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG APPR.		D212-725-1	SHEET 23 OF 1
APPROVED		TITLE	SCALE
DE APPR		D212S DETAIL PARTS	NTS
DATE	08.MM DD	COPYRIGHT © 2008 BY DART AEROSPACE LTD	

W/O 42033

CLIENT

M-100435

CINTUBE LTEE/LTD

CLIENT

BON. LIVR.:

RELACHE

PACK. SLIP

M-100435

RELEASE

DATE:

16-Sep-08

COMMANDE #:

7167

ORDER #:

EXPED. A/TO :
SAME

☒ 333 BOUL. ST-JOSEPH, BUILDING # 105 ☐ 1250 MATHESON BLVD. EAST
LACHINE, QUEBEC MISSISSAUGA, ONTARIO
H8S 2K9 L4W 1R2
TEL: (514) 634-3592 TEL: (905) 625-190
FAX: (514) 636-3336 / 8625 FAX: (905) 625-1500

Rep: JASON ROBINSON

CLIENT NO.	MAT'L PAR / MAT'L BY	REFERENCE	MODE DE PAIEMENT / TERMS OF PAYMENT
MDAR72	CINTUBE & CLIENT		C.O.D. (VISA : VOIR CLAIRE)
TRANSPORT		DATE LIV. / DELIV. DATE	CONTACT
PUROLATOR COLLECT #7684382		1 A/TO 2 SEM./WKS	CHANTAL LAVOIE

CONTACT PHONE #: (613) 632-9577 EXT. #:
FAX #: (613) 632-1053

QUANT	EXP.	DIMENSION / SIZE	EP / WALL	DESCRIP. MAT'L. / MAT'L DESCRIP.	DEG.	RAY. / RAD.	TANGENTE / TANGENT	INSTRUCTIONS
5	5	0.625 OD	0.035	PART NO. DART D212-725-1 S73 SMLS TUBE SS/304L	8 BENDS		SEE DRWG: D212-725-1 S73	FINAL CUT & FLARE ONE END
5	5	0.5 OD	0.035	PART NO. DART D212-725-1 S68 SMLS TUBE SS/304L	6 BENDS		SEE DRWG: D212-725-1 S68	FINAL CUT & FLARE ONE END
2	2			TWO COPIES OF MILL TEST REPORTS				
2	2			TWO COPIES OF LETTER OF COMPLIANCE				

Notes:

CATEGORIE ISO
ISO CATEGORY

1 2 3

☐ ☒ ☐

ASME

☐CERTIFICAT D'ANALYSE
MILL TEST CERTIFICATEOUI
YESLETTRE DE CONFORMITE
LETTER OF COMPLIANCEOUI
YES

EXPEDIE PAR / SHIPPED BY:

DATE CLIENT AVIS. / ADV.:

CONTACT:

PAR/BY:

DATE: 09-11-08

CLIENT:

DATE:

CLIENT: Page 1 of 1
DART AEROSPACE LTD.
1270 ABERDEEN ST.

HAWKSBURY
ON K6A 1K7

EXPED. A/TO :
SAME

M-100435

CINTUBE LTEE/LTD

☒ 333 BOUL. ST-JOSEPH, BUILDING # 10 ☐ 1250 MATHESON BLVD. EAS
LACHINE, QUEBEC MISSISSAUGA, ONTARIO
H8S 2K9 L4W 1R2
TEL: (514) 634-3592 TEL: (905) 625-1900
FAX: (514) 636-3336 / 8625 FAX: (905) 625-1500

Rep: JASON ROBINSON

CINTUBE

BON. LIVR RELACHE
M-100435
PACK. SLIP RELEASE

DATE: 16-Sep-08
COMMANDE #: 7167
ORDER #:

CLIENT NO. MDAR72 MAT'L PAR / MAT'L BY CINTUBE & CLIENT REFERENCE

MODE DE PAIEMENT / TERMS OF PAYMENT
C.O.D. (VISA - VOIR CLAIRE)

CONTACT PHONE #: (613) 632-9577 EXT. #:
FAX #: (613) 632-1053

TRANSPORT
PUROLATOR COLLECT #7684382

DATE LIV. / DELIV. DATE
1 A/TO 2 SEM. WKS

CONTACT
CHANTAL LAVOIE

QUANT	EXP.	DIMENSION / SIZE	EP / WALL	DESCRIP. MAT'L / MAT'L DESCRIP.	DEG.	RAY. / RAD.	TANGENTE / TANGENT	INSTRUCTIONS
5	1	0.625 OD	0.035	PART NO. DART D212-725-1 S73 SMLS TUBE SS/304L	8 BENDS			FINAL CUT & FLARE ONE END
5	1	0.5 OD	0.035	PART NO. DART D212-725-1 S68 SMLS TUBE SS/304L	6 BENDS			FINAL CUT & FLARE ONE END
2	2			TWO COPIES OF MILL TEST REPORTS				
2	2			TWO COPIES OF LETTER OF COMPLIANCE				

Notes:

SENT WITH SHIPMENT *Oct. 17/08*

CATEGORIE ISO
ISO CATEGORY

1 2 3
1 1 1

CERTIFICAT D'ANALYSE
MILL TEST CERTIFICATE

OUI
YES ☒

LETTRE DE CONFORMITE
LETTER OF COMPLIANCE

OUI
YES ☒

ASME

DATE CLIENT AVIS. ADV

CONTACT

PAR/BY

EXPEDIE PAR / SHIPPED BY

DATE *Oct 17/08*

CLIENT

DATE

CINTUBE

LTEE
LTD.

OUTILAGE DE PRÉCISION DE TUBES, TUYAUX, CORNIÈRES, POUBRES,
PROFILÉS EN "U" ET SERPENTINS
MANUFACTURE DE GÉNÉRATRICE À VAPEUR, ÉLÉMENT CHAUFFANT,
RÉCUPÉRATEUR DE CHALEUR, ÉCONOMISEUR ETC
PRECISION BENDING OF TUBES, PIPES, ANGLES, BEAMS, CHANNELS, COILS
MANUFACTURERS OF STEAM GENERATORS, THERMAL FLUID HEATERS,
WASTE HEAT RECOVERY UNITS, ECONOMIZERS

333 BOUL. ST-JOSEPH, LACHINE, QUÉBEC H8S 2K9
TÉLÉPHONE: (514) 364-6426 FAX NO: (514) 636-3336

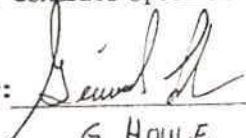
LETTRE DE CONFORMITÉ - LETTER OF COMPLIANCE

Client/Customer DART AEROSPACE LTD Date: NOV. 06/08
N° de commande du client/Customer order No: 7167
Notre n° de feuille de route/Our order No: 100435
Notre n° de dessin/Our drawing No: -
Description/Customer drawing No: D212-725-1 S68, D212-725-1 S73
Nom de la pièce/Part Name: P/N D212-725-1-203, P/N D212-725-1-213
4 pcs OF EACH

La présente est pour certifier que le matériel ci-haut mentionné se conforme aux exigences contractuelles de qualité et/ou de la confirmation de la commande, qu'il a été produit, inspecté et testé selon les spécifications standards applicables de notre programme de contrôle de la qualité, du contrat et du(les) dessin(s).

This is to certify that the material covered by this document conforms to the quality requirements of the purchase order or contract, that the material has been produced, verified and tested according to applicable standard specifications listed in our quality control procedures, contract specifications and/or drawing(s).

Signé par/Signed by:



G. HOULE pour B. WERBURY

Directeur des services techniques/Technical Services Director

Pour la Compagnie Cintube Ltee/On behalf of Cintube Ltd.

F 10.4.5

ROCKWELL ALLOY CO., LTD

MILL TEST CERTIFICATE

Certificate No. 2003-04-09

Messrs. NORCA INDUSTRIAL CO., LLC

100435
DART AEROSPACE
7167
Nov.06/08
Date APR. 16, 2003

Order No.	530/001225			Invoice No.	RW0304-1										
Descrip.	STAINLESS STEEL SEAMLESS TUBING			Specification	ASTM A269-00 A213-99A/SA213		Type	TP304/TP304L							
Item No.	Size	Quantity		Manufacturing No.	Hydrostatic Test	O.D. POLISHED									
		Pcs	Weight kg												
1	3/8" x 0.049" x 20.0FT	280	434	0302-28	GOOD	180 Grit									
2	5/8" x 0.065" x 20.0FT	52	191	0302-07	GOOD	180 Grit									
3	1-1/2" x 0.065" x 20.0FT	54	511	0302-10	GOOD	180 Grit									
4	3/4" x 0.120" x 20.0FT	101	739	0302-35	GOOD	180 Grit									
5	5/8" x 0.035" x 20.0FT	104	201	0302-50	GOOD	180 Grit									
6	5/8" x 0.095" x 20.0FT	55	278	0303-94	GOOD	180 Grit									
Chemical Composition (%)										Physical/Tension Test			Hardness	Flattening	Solution Heat Treatment
	C	Si	Mn	P	S	Ni	Cr	Mo	Heat No.	Yielding Strength	Tensile Strength	Elongation %	HRB	Test	
Max.	0.035	0.75	2.00	0.040	0.030	13.00	20.00						90		
Min.						8.00	18.00			30000	75000	35			1040°C
1	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	46400	92800	55	71	GOOD	1040°C
2	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	44950	89900	56	70	GOOD	1040°C
3	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	49300	97875	54	70	GOOD	1040°C
4	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	42775	85550	59	72	GOOD	1040°C
5	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	47850	95700	55	70	GOOD	1040°C
6	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	44950	89900	54	70	GOOD	1040°C
Remarks:	CORROSION TEST: GOOD FLARING TEST: GOOD THIS MATERIAL TO SPECIFY THAT THE TUBING MEETS NACE MR0-175 REV.2002														



ROCKWELL ALLOY CO., LTD

MILL TEST CERTIFICATE

Certificate No. 2003-04-09

Messrs. NORCA INDUSTRIAL CO., LLC

100435

DART AEROSPACE

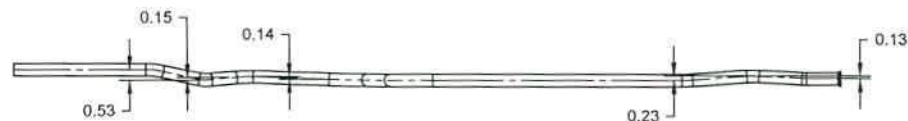
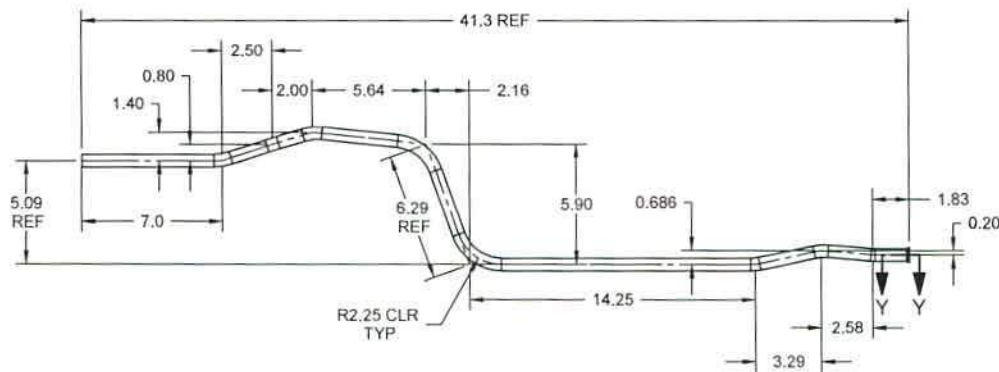
7167

NOV.06/08

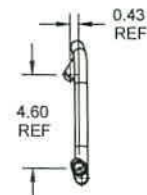
Date APR. 16, 2003

Order No.	530/001225				Invoice No.				RW0304-1						
Descrip.	STAINLESS STEEL SEAMLESS TUBING				Specification				ASTM A269-00 A213-99A/SA213			Type	TP304/TP304L		
Item No.	Size	Quantity				Manufacturing No.	Hydrostatic Test	O.D.							
		Pcs	Weight kg						POLISHED						
1	3/8" x 0.049" x 20.0FT	280	434			0302-28	GOOD	180 Grit							
2	5/8" x 0.065" x 20.0FT	52	191			0302-07	GOOD	180 Grit							
3	1-1/2" x 0.065" x 20.0FT	54	511			0302-10	GOOD	180 Grit							
4	3/4" x 0.120" x 20.0FT	101	739			0302-35	GOOD	180 Grit							
5	5/8" x 0.035" x 20.0FT	104	201			0302-50	GOOD	180 Grit							
6	5/8" x 0.095" x 20.0FT	55	276			0303-94	GOOD	180 Grit							
	Chemical Composition (%)									Physical/Tension Test			Hardness	Flattening	Solution Heat Treatment
	C	Si	Mn	P	S	Ni	Cr	Mo	Heat No.	Yielding Strength	Tensile Strength	Elongation %			
	Max.	0.035	0.75	2.00	0.040	0.030	13.00	20.00						HRB	Test
Min.						8.00	18.00			30000	75000	35	90		
1	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	46400	92800	55	71	GOOD	1040°C
2	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	44950	89900	56	70	GOOD	1040°C
3	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	49300	97875	54	70	GOOD	1040°C
4	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	42775	85550	59	72	GOOD	1040°C
5	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	47850	95700	55	70	GOOD	1040°C
6	0.021	0.30	1.94	0.024	0.002	9.20	18.21		1w289	44950	89900	54	70	GOOD	1040°C
Remarks:	CORROSION TEST: GOOD FLARING TEST: GOOD THIS MATERIAL TO SPECIFY THAT THE TUBING MEETS NACE MR0-175 REV.2002														
<div>Director, Technology</div>															

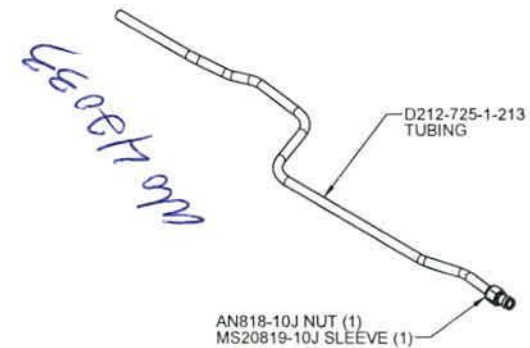




D212-725-1-213 TUBING
(MANUFACTURE PER TEMPLATE DT8917)



SECTION Y-Y
(FINISH FLARE THIS
END AFTER ASSEMBLY)
SCALE 3X



D212-725-1-937 TUBE ASSEMBLY

NOTES:

- 1) MATERIAL: AISI 304/316 SS $\phi 0.625 \times 0.035$ WALL SEAMLESS ROUND TUBING (REF. DART SPEC. M304TR0.625W.035)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY B/N & P/N D212-725-1-937 USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: N/A

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	DS	DRAWING NO.	REV. E
MFG. APPR.	N/A	D212-725-1	SHEET 73 OF 82
APPROVED		TITLE	SCALE
DE APPR.		D212S DETAIL PARTS	NTS
DATE	08.09.17	COPYRIGHT © 2008 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	